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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,582

12/13/2005

Yoshihito Hamada

0425-1233PUS1

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2292 7590 07/29/2009  
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EXAMINER

CORDRAY, DENNIS R

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

07/29/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,582	<b>Applicant(s)</b> HAMADA ET AL.	
	<b>Examiner</b> DENNIS CORDRAY	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-18 is/are pending in the application.
- 4a) Of the above claim(s) 6-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/6/2009 has been entered.

### ***Response to Arguments***

Applicant's amendments and arguments, filed 5/6/2009, have overcome the outstanding the rejections of claims 1, 3, 4, 20 and 21 under 35 U.S.C. 103(a) over the cited prior art. The prior art fails to disclose the claimed emulsifying and dispersing agent. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground of rejection is made as detailed herein.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auweter et al (WO 02/-26892 - US 2003/0177943 of the same patent family used herein for English translation) as evidenced by Smook (Handbook of Pulp and paper Technology).

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Auweter et al discloses polymer coated pigment particles in dried powder form and having a particle size from 10 nm to 5  $\mu$ m (Abs; p 1, par 1; p 3, par 97; p 6, pars 139 and 140). Suitable polymers for coating the pigment particles are copolymers of ethylenically unsaturated monomers that include:

esters of C<sub>3</sub>-C<sub>8</sub> monocarboxylic acids with C<sub>1</sub>-C<sub>12</sub> alkanols,

vinyl esters of C<sub>1</sub>-C<sub>12</sub> monocarboxylic acids,

styrene,

C<sub>2</sub>-C<sub>6</sub> olefins or diolefins (e.g.-ethylene, propene, butadiene),

mono C1-C4 alkylamides of the recited monocarboxylic acids (acrylamides and methacrylamides are mentioned as alkylamides), and

cationic monomers (p 4, pars 103-108, 116 and 117).

The esters, vinyl esters, styrene, olefins and alkylamides are species that have the claimed dissolution parameter according to the instant Specification (p 26, 2nd par). The coating polymers thus overlay the claimed emulsifying and dispersing agent.

The solutions used to form the polymer coated particles contain a protective colloid (e.g.-dextrins) and an emulsifier. The protective colloid stabilizes the dispersions of particles by preventing agglomeration of the colloidal dispersed particles (p 5, pars 121-123). Suitable emulsifiers include glyceryl monostearate and sugar surfactants such as sorbitan fatty acid esters, which are esters of aliphatic acids and alcohols (p 5, par 131), thus read on the claimed hydrophobic component.

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To form the dried powder composition, the solvents are evaporated to concentrate the product. Further protective colloids may be added during the concentrating to obtain better colloidal stabilization (p 6, par 139).

Auweter et al does not explicitly recite that the hydrophobic organic compound (the emulsifier of Auweter et al) and the polymer are evenly dispersed and enclosed within the water soluble saccharide (dextrins). However, the purpose of the protective colloid (dextrins) is to surround colloidal particles and prevent coagulation (see Smook, p 60 if evidence is needed), thus obtaining a mixture wherein the polymer and hydrophobic organic compound are enclosed within the dextrins would have been obvious to one of ordinary skill in the art.

The emulsifier of Auweter et al reads on the claimed hydrophobic organic compound thus is a bulking agent or, at least, it would have been obvious to one of ordinary skill in the art that it is a bulking agent because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent or at least obvious.

Note that the claims are directed to a composition and the intended use thereof is given no patentable weight. The pigment preparations can be used in manufacturing printed or decorated papers (p 6, pars 143-147). Alternatively, the pigment compositions include pigments typically used as fillers and colorants for paper, such as

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titanium dioxide, zinc oxide, calcium carbonate, SiO<sub>2</sub>, and colored pigments that can be used to color paper (pp 2-3, pars 20-92) and it would have been obvious to use the compositions in the manufacture of pigmented and filled paper.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS CORDRAY whose telephone number is (571)272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis Cordray/  
Examiner, Art Unit 1791

/Eric Hug/  
Primary Examiner, Art Unit 1791